

From glowbugs@theporch.com Sat Nov 30 10:28:16 1996
Return-Path: <glowbugs@theporch.com>
Received: from uro (localhost.theporch.com [127.0.0.1])
by uro.theporch.com (8.8.4/AUX-3.1.1)
with SMTP id KAA22697;
Sat, 30 Nov 1996 10:23:06 -0600 (CST)
Date: Sat, 30 Nov 1996 10:23:06 -0600 (CST)
Posted-Date: Sat, 30 Nov 1996 10:23:06 -0600 (CST)
Received-Date: Sat, 30 Nov 1996 10:23:06 -0600 (CST)
Message-Id: <199611301623.KAA22697@uro.theporch.com>
Errors-To: conard@tntech.campus.mci.net
Reply-To: glowbugs@theporch.com
Originator: glowbugs@theporch.com
Sender: glowbugs@theporch.com
Precedence: bulk
From: glowbugs@theporch.com
To: Multiple recipients of list <glowbugs@theporch.com>
Subject: GLOWBUGS digest 368
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@theporch.com
Status: 0

GLOWBUGS Digest 368

Topics covered in this issue include:

- 1) Heath IM-13 VTVM
by Robert Paschal <r-paschal@worldnet.att.net> (by way of Robert Paschal <r-paschal@worldnet.att.net>)
- 2) Re: interesting TX circuit
by lee@radioadv.com (Lee Richey)
- 3) Re: Xmtr update
by lee@radioadv.com (Lee Richey)
- 4) Re: MOPA
by "Brian Carling" <bry@mail1.mnsinc.com>
- 5) NEW 6L6 and 6AQ5A articles!
by "Brian Carling" <bry@mail1.mnsinc.com>
- 6) new member
by larry@stl-online.net
- 7) Re: Heath IM-13 VTVM
by John D Young <jdy@whitney.ufl.edu>
- 8) Re: new member
by "Brian Carling" <bry@mnsinc.com>

Date: Fri, 29 Nov 1996 21:03:56 +0000
From: Robert Paschal <r-paschal@worldnet.att.net> (by way of Robert Paschal <r-

paschal@worldnet.att.net>
To: glowbugs@theporch.com
Subject: Heath IM-13 VTVM
Message-ID: <19961129210354.AAA16775@LOCALNAME>

If anyone has a schematic or manual for the Heath IM-13 VTVM I would appreciate your checking and giving me the AC voltage across the high voltage secondary of the power transformer under operating conditions and also the current load.

Judging from the similarity of the circuit to that of my later IM-18 I think it should be about 120v at 10 mils. Tubes are a 6AL5 and a 12AU7.

I recently acquired this at a swap meet mainly for parts but if I can rebuild the sick power supply without too much expense -- ?? I can replace the selenium rectifier with a silicon.

Only other problem, I hope, is finding a power transformer per above and with the proper 6.3v heater winding.

Thanks, Bob - AA0MC

Date: Fri, 29 Nov 1996 15:41:01 -0500
From: lee@radioadv.com (Lee Richey)
To: <broehrig@admin.aurora.edu>,
Subject: Re: interesting TX circuit
Message-ID: <19961129210845249.AAD83@lee.radioadv.com>

>
> Looking thru a Jan 1947 of CQ, I found an interesting transmitter ckt.
> It has an 807 final and uses a 25 watt lamp in the cathode for
> protection and this looks very interesting. The lamp is connected between
> cathode and ground and is bypassed with both a .01 and a 4uf cap.

This scheme works pretty well. If you take a look at the (very poor) schematic of the 6BM8 tx discussed here, you will see a similar application. I used a lower voltage lamp to minimize the cathode bias that would develop but you can use whatever you like. The idea is to have a relatively small voltage drop at normal operating currents.

The lamp also works nicely as a tuning indicator. Dip the plate tuning control (minimum brightness) and increase loading until the difference between off resonance and resonance is slight.

BTW the schematic is at:

www.cosmosbbs.com/6bm8sch.jpg

-Lee- -WA3FIY-

<http://www.radioadv.com>

Date: Fri, 29 Nov 1996 15:50:14 -0500
From: lee@radioadv.com (Lee Richey)
To: <kenwood@nwlink.com>,
Subject: Re: Xmtr update
Message-ID: <19961129210845249.AAE83@lee.radioadv.com>

Hi Dave and the group,

> I should have pix of my 6V6 rig tomorrow. I shot them today
> and will do the 1-hour thing and scan them. I'll let those
> who emailed interest know when I have 'em.

I'd like to see the pix too. Sounds like a fun rig.

> B+ after bleeder, Key UP 398 DC
> B+ after bleeder, Key DN 360 DC
>
> Screen voltage, Key UP 266 DC
> Screen voltage, Key DN 220 DC (wee bit of chirp)
>
> Plate current, Key DN 35 ma at resonance
>
> Calculated power 12.6 watts RF
> As measured on Kenwood AT180 14.5 watts (how accurate?)
>

The INPUT power is 12.6 watts. The OUTPUT has to be a lot less.
Say 60 to 70% of input at best. So best guess is, the rig runs
about 8 watts out. As you have already seen, that's plenty to
have lots of great contacts and lot's of fun.

-Lee- -WA3FIY-

<http://www.radioadv.com>

Date: Sat, 30 Nov 1996 03:56:03 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>

To: glowbugs@theporch.com
Subject: Re: MOPA
Message-ID: <199611301152.GAA06785@user2.mnsinc.com>

The results so far:

2 watts of RF out according to the MFJ-949D tuner/wattmeter.
Probably accurate plus or minus 50% (!)
I made two QSOs on 7050 kHz yesterday:
W8VFM in Sand Creek, MI gave me RST 569, and
VE3XQ in Peterborough, ON gave me RST 579

Not bad for a start!

I worked the first one with alligator clips for a "straight key" then struggled with a reed relay driver circuit for hours juggling the resistor values to try to get it right. When I finally did, my CMOS keyer's batteries began to falter in the middle of the QSO. The symptom was confusing and made me think I still had a problem with the keying circuit. It would drop about every 2nd or 3rd DIT that occurred immediately after a dah! Going to buy batteries & install a switch today!

The original design of the CMOS logikeyer II called for NO power switch since it cycles off internally when not in use and drops to a few micro-amperes, but since I didn't use it sometimes for a few weeks, it still managed to consume the three AA cells after about 18 months. They were 'taking up too much room in the case anyway, so I am going to three AAA cells and put a power switch on the unit. At last I will be able to put screws in the case and make it look tidy!

As to the MOPA, I think it should be capable of a bit more than 2 watts out! I am going to look at upping the screen voltage on the xtal osc stage just a bit. I think it is running maybe 70 volts now. The signal is ultra clean, so I am going to see what happens with higher voltage and see how far up I can take it without any degradation.

Yes, like the other commenter, I REALLY like 6AG7 xtal oscillators!

See you all on 7050 kHz soon!

*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** <http://www.mnsinc.com/bry/> *

Date: Sat, 30 Nov 1996 05:11:56 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: glowbugs@theporch.com
Subject: NEW 6L6 and 6AQ5A articles!
Message-ID: <199611301308.IAA08464@user2.mnsinc.com>

I have sent a couple more articles for posting at the web site.
6AQ5A_1.GIF and SCROUNGR.GIF
The latter is an article sent to me by WB6TNL describing his homebrew
6L6 TX that he has been having fun with.
Some of you fellers might enjoy building these "oldies but goodies!"

They are simple one tube "junkbox transmitters" that you can put
together from scratch in one day once you have collected the parts.

The articles can be found at:

<http://www.barepower.net/~carreiro/>

or take the LINK there from -

<http://www.mnsinc.com/bry/hamfiles.htm>

Enjoy! 73 de AF4K, Bry

*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** <http://www.mnsinc.com/bry/> *

Date: Sat, 30 Nov 1996 07:15:34 -0600
From: larry@stl-online.net
To: glowbugs@theporch.com
Subject: new member
Message-ID: <32A03376.3948@stl-online.net>

Hello everyone;

My name is Larry and my call is AA0DM. This is my first entry. I've been reading the listings for about a week and find it very interesting and informative. My interests are Ham radio and wood working. Right now I only work QRP and almost entirely CW. I've been a Ham for nearly 20 yrs and I am 44yrs old. I currently use a TenTec ArgonautII and I just purchased a Drake 2B receiver that I just cleaned up and tuned, it works great. I just built the Bare Essentials Xmtr and used it for the first

time the other night- three contacts right off the bat- Colorado, Florida and California. I'm hooked. I wanted to build that rig when I was a kid but never did til now. I'm going out today to get parts for a 6T9 xmtr that I'm going to build next. Hello again and thanks for this great service!

Larry Naumann AA0DM
St.Louis,MO
Larry@stl-online.net

Date: Sat, 30 Nov 1996 08:56:10 -0500 (EST)
From: John D Young <jdy@whitney.ufl.edu>
To: Robert Paschal <r-paschal@worldnet.att.net>
Subject: Re: Heath IM-13 VTVM
Message-ID: <Pine.LNX.3.91.961130084708.3399A-100000@whitney.ufl.edu>

Bob
before you gut the meter for parts consider converting it to SOLID-STATE.
I know that is a dirty word here, but... After converting my Heath VTVM based on an article in an old Ham Radio, it performed much better and runs on batteries that have lasted several years. After the conversion you will have a power transformer and 2 tubes for glowbug projects.
If anyone is interested I will did out the article and my notes and make some copies.

73 John
WA8KNE

On Fri, 29 Nov 1996, Robert Paschal wrote:

> If anyone has a schematic or manual for the Heath IM-13 VTVM I would
> appreciate your checking and giving me the AC voltage across the high
> voltage secondary of the power transformer under operating conditions and
> also the current load.
> Judging from the similarity of the circuit to that of my later IM-18 I think
> it should be about 120v at 10 mils. Tubes are a 6AL5 and a 12AU7.
>
> I recently acquired this at a swap meet mainly for parts but if I can
> rebuild the sick power supply without too much expense -- ?? I can replace
> the selenium rectifier with a silicon.
>
> Only other problem, I hope, is finding a power transformer per above and
> with the proper 6.3v heater winding.
>
> Thanks, Bob - AA0MC

>

Date: Sat, 30 Nov 1996 05:59:28 +0000
From: "Brian Carling" <bry@mnsinc.com>
To: larry@stl-online.net, glowbugs@theporch.com
Subject: Re: new member
Message-ID: <199611301355.IAA09658@user2.mnsinc.com>

HEY! It's a reply from AF4K!

Hello Larry - good to see that you made it here!
That 6T9 xmtr sounds great! Where did you get the schematic for it?

On 30 Nov 96, larry@stl-online.net wrote:

> Hello everyone;
> My name is Larry and my call is AA0DM. This is my first entry. I've
> been reading the listings for about a week and find it very
> interesting and informative. My interests are Ham radio and wood
> working. Right now I only work QRP and almost entirely CW. I've been
> a Ham for nearly 20 yrs and I am 44yrs old. I currently use a TenTec
> ArgonautII and I just purchased a Drake 2B receiver that I just
> cleaned up and tuned, it works great. I just built the Bare
> Essentials Xmtr and used it for the first time the other night-
> three contacts right off the bat- Colorado, Florida and California.
> I'm hooked. I wanted to build that rig when I was a kid but never
> did til now. I'm going out today to get parts for a 6T9 xmtr that
> I'm going to build next. Hello again and thanks for this great
> service!
>
> Larry Naumann AA0DM
> St.Louis, MO
> Larry@stl-online.net
>

*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** <http://www.mnsinc.com/bry/> *

End of GLOWBUGS Digest 368
